## Sound Bytes/Laurie Flynn

# A New Power in Publishing

### Brewster Kahle

**Born:** Oct. 22, 1960; New York.

**Education:** B.S. in electrical engineering, computer science with a major in artificial intelligence, Massachusetts Institute of Technology.

**Noncomputer reading:** "The Autobiography of Benjamin Franklin" because "he was a printer, too."
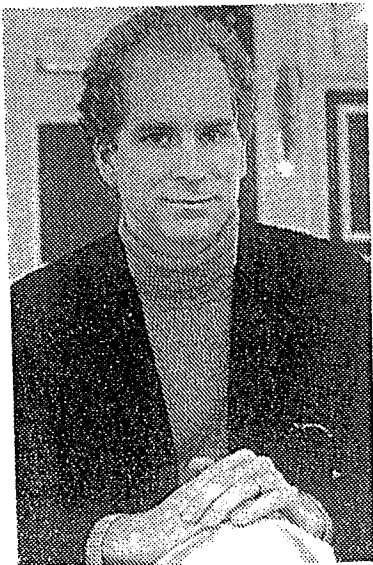
**Car:** Green 1963 Volvo P-1800.

**Ideal vacation:** Visiting developing countries. Recently traveled in Indonesia with his wife, Mary Austin.

**Family:** Expecting a baby in September.

**Hobby:** Printing; owns an 80-year-old letterpress.

**Personal Computer:** Macintosh Powerbook Duo 210.

MORE than a decade ago Brewster Kahle left the relative quiet of the Massachusetts Institute of Technology's artificial intelligence laboratory to help found the Thinking Machines Corporation in Cambridge, Mass., which designs some of the world's most powerful computers.

But for Mr. Kahle (pronounced KALE), it wasn't enough to simply compute quickly; he wanted to apply supercomputing power to the problem of "information overload."

So Mr. Kahle left Thinking Machines in 1992 and set out to apply computing power to publishing. As the founder and president of WAIS Inc., which stands for Wide Area Information Servers, Mr. Kahle and his staff of a dozen workers are developing software tools to help people publish information and documents on the Internet, the global web of computer networks. As a developer of new distribution and retrieval techniques for the Internet, the company, based in Menlo Park, Calif., is in effect helping to create an electronic publishing industry.

WAIS's products include software for servers — computers that control the flow of information on networks — that lets people distribute information on the Internet. It has also developed protocols — software instructions — that enable personal computers to communicate with servers.

The first documents on the Internet using WAIS were published last summer, and the first commercial WAIS-based publications are to be available on the Internet this summer.

**Question:** WAIS grew out of something you were working on at Thinking Machines. How did it evolve?

**Answer:** At Thinking Machines, I worked on Connection machines — massively parallel computers. We made 15 gigabytes browsable — that's equivalent to 150 years of daily newspapers. The question was, how could you make this kind of power usable by people?

So I put together a consortium of four companies. Thinking Machines knew searching, Apple Computer knew all about user interface design and Dow Jones was about one-stop shopping for information. Peat Marwick was our user base of $300-an-hour people who knew the value of information.

But we found there were certain pieces that weren't being done very well by the group — the protocols an low-end servers. We founded WAI Inc. to do just those pieces.

**Q:** Why does the Internet need companies like WAIS?

**A:** We're trying to make network useful for more than just electronic mail and bulletin boards. We're th next wave of information technology Most people have spent their time building the network infrastructure Our particular piece is network put lishing.

We're enabling a new publishin. industry so that people can mak money publishing on the Internet This summer, through Dow Jones' Dowvision, we'll be making The Wa Street Journal and the same-day New York Times available over the net work. We're also working with the Government Printing Office and the Library of Congress to publish on the network.

**Q:** As inventor of WAIS, how woul you define it and how does it fit in with other Internet tools, like Gophe and World Wide Web?

**A:** What we're constructing is like . network book. Gopher is the table c contents, using hierarchical brows ing; World Wide Web is hypertex pages with embedded graphics, and WAIS is the index — it allows the use to browse and search information.

**Q:** What's the difference between WAIS and the traditional electronic services like Nexis and Dialog?

**A:** WAIS is a distributed infrastructure, a client-server system. You machine can contact potentiall many services at once. It could cor tact a service in Indiana at the sam time as it contacts one in Hong Kon and another in California. This is dif ferent from the centralized approac of Mead and Dialog.

**Q:** WAIS is helping people mak money distributing data in an env ronment where traditionally it is free How is that going over?

**A:** It's very welcomed by the Inte net community when it's done th Internet way. We're using open protc cols, based on real standards as op posed to proprietary systems.

And you need to offer a mix c commercial and free information an software. We find if we do it that wa it's welcomed at the highest levels the Internet community.